Abstract:

Intruduction: Helicobacter Pylori, as a gram negative bacterium colonizing in the gastric mucosa, induces gastrodeudenal complications varying from mild gastritis to gastric malignancies. mmp-9, an enzyme with protease activity, plays key role in cancer induction and metathesis. Regarding to high incidence of gastric cancer in Ardabil province, the present study was conducted with the following major question whether the increase of serum level of mmp-9 can be seen before induction of cancer by H.P.

Methods: Serum and stool specimens together were obtained from 200 apparently healthy individuals. Samples were stored at -70 ^{o}C until ELISA experiments. ELISA kits were used to assess H.Pylori Ag in stools and serum concentration of mmp-9.

Results: Obtained results showed increase of serum level of mmp-9 in H.P infected person in comparison to healthy ones.

Discussion: Albeit our results show increase in serum level of mmp-9 in infected persons but this is not significant. Previous studies showed significant increase in mmp-9 concentration in biopsy samples prepared from H.P. infected persons. This controversy may arise from differences in studied population, variety of H.P., the manner of sampling and detection of H.P. infection. We suggest making a similar investigation with special regards to these factors.

Key words: Helicobacter Pylori, gastric malignancies, mmp-9, ELISA,